

to raise a fund for the establishment of a memorial to the late Dr. Marion Newbigin, who for thirty years edited the Scottish Geographical Society's magazine. Subscriptions are invited from friends who wish to

take some part in commemorating her services to geography. These should be sent to the Treasurer, Royal Scottish Geographical Society, Synod Hall, Castle Terrace, Edinburgh.

SCIENTIFIC EVENTS

REPORT OF THE BRITISH ASTRONOMER ROYAL

As is customary on the first Saturday in June, the Board of Visitors of the Royal Observatory assembled at Greenwich to make their annual visitation and to hear the Astronomer Royal's report. The members of the board are the presidents and six fellows each of the Royal and the Royal Astronomical Societies, the Savilian professor of astronomy at Oxford, the Plumian professor of astronomy at Cambridge and the hydrographer of the Admiralty.

The London *Times* states that in beginning his report, which referred to the year ended April 30 last, Dr. Spencer Jones, Astronomer Royal, described the counterpoise system adopted for the new reversible transit circle, the erection of which was practically completed at the end of March, in order to relieve the weight on the bearings.

In a free-pendulum clock now nearing completion, which is being presented by H. R. Fry, time will be taken directly off the free pendulum by a photo-electric method.

The sun, moon, major and minor planets and fundamental stars were regularly observed with the transit circle. The observations of the moon continued to show a decrease in the correction to the longitude given by Brown's tables, which were introduced into the *Nautical Almanac* in 1923. The correction, which was then 9 sec. of arc, fell last year to little more than 3 sec.

Regular observation of the brighter minor planets has been resumed in view of the attention recently given to the possibility of using them for fixing equinox and equator point. Further progress was made with the measurement of the photographs taken of the planet Eros at various observatories in 1930-31.

Among meteorological observations the amount of solid matter polluting the air was regularly measured by an Owens automatic filter and was found on the whole to be substantially less in the winter of 1935-36 than in the previous winter, probably because of the much smaller proportion of wind coming from a northerly direction. Gaseous pollution of the atmosphere by sulfur dioxide appeared to vary greatly from day to day.

In the worst days of January and February, in both 1935 and 1936, this pollution approached and occa-

sionally exceeded 0.2 parts by volume in a million, but on good days less than one tenth of this amount was present. Pollution is found to be greatest on days of calm air, drifting from a northerly direction, generally accompanied by fog. It is reduced to a minimum by a strong southerly wind.

The mean temperature of the year was 50.2 deg. F., or 0.7 deg. higher than the average of the 75 years 1841-1915. The total rainfall was 26.11 in., or 1.87 in. more than the average for the 75 years 1841-1915. The wettest month was November, with 3.59 in., and the driest July, with 0.56 in.

FLOOD CONTROL

SECRETARY OF AGRICULTURE HENRY A. WALLACE has announced that problems of "up-stream" engineering in relation to flood control and land conservation will be discussed at a conference of experts from the United States and foreign countries in Washington, on September 22 and 23.

The conference will be called by a special committee appointed by President Roosevelt. Members of the committee are H. H. Bennett, chief of the Soil Conservation Service; Morris L. Cooke, administrator of the Rural Electrification Administration, and F. A. Silcox, chief of the Forest Service.

In announcing the conference, Mr. Wallace made public a letter from President Roosevelt pointing out the need for coordinating land-use principles with existing knowledge of down-stream engineering methods in federal planning for flood control and land conservation. The President's letter follows:

Up-stream engineering will have a major part in efforts to save the land and control floods, and for that reason it offers a broad field of opportunity for the engineering profession. I am therefore in hearty accord with your suggestion that there be held an open conference on the subject in the early fall. The date might well be in proximity to that of the Third World Power Conference in September, in the hope that some of the distinguished foreign engineers attending the latter may be interested also in contributing to the proposed conference.

There are indications that a substantial body of technical information on the control of little waters is now available in the scattered records of American experience—federal, state and professional. The urgent problem is to bring these data together into a coordinated body of engineering knowledge so that public officials and engi-